The 6CU5 is a miniature beam-power pentode primarily designed for use in the audio-frequency power-output stage of radio receivers. The tube features high power sensitivity and high efficiency at relatively low plate and screen voltages.

**GENERAL**

**ELECTRICAL**
- Cathode—Coated Unipotential
- Heater Voltage, AC or DC: 6.3 Volts
- Heater Current: 1.2 Amperes
- Direct Interelectrode Capacitances:
  - Grid-Number 1 to Plate: 0.6 $\mu$F
  - Input: 0.13 $\mu$F
  - Output: 0.85 $\mu$F

**MECHANICAL**
- Mounting Position—Any
- Envelope—T-5½, Glass
- Base—E7-1, Miniature Button 7-Pin

**MAXIMUM RATINGS**

**DESIGN-CENTER VALUES**
- Plate Voltage: 135 Volts
- Screen Voltage: 117 Volts
- Positive DC Grid-Number 1 Voltage: 0 Volts
- Plate Dissipation: 6.0 Watts
- Screen Dissipation: 1.25 Watts

Heater-Cathode Voltage
- Heater Positive with Respect to Cathode
  - DC Component: 100 Volts
  - Total DC and Peak: 200 Volts
- Heater Negative with Respect to Cathode
  - Total DC and Peak: 200 Volts

Grid-Number 1 Circuit Resistance
- With Fixed Bias: 0.1 Megohms
- With Cathode Bias: 0.5 Megohms

Bulb Temperature at Hottest Point: 220°C
CHARACTERISTICS AND TYPICAL OPERATION

CLASS A; AMPLIFIER

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>120 Volts</td>
</tr>
<tr>
<td>Screen Voltage</td>
<td>110 Volts</td>
</tr>
<tr>
<td>Grid-Number 1 Voltage</td>
<td>-8.0 Volts</td>
</tr>
<tr>
<td>Peak AF Grid-Number 1 Voltage</td>
<td>8.0 Volts</td>
</tr>
<tr>
<td>Plate Resistance, approximate</td>
<td>10000 Ohms</td>
</tr>
<tr>
<td>Transconductance</td>
<td>7500 Micromhos</td>
</tr>
<tr>
<td>Zero-Signal Plate Current</td>
<td>49 Milliamperes</td>
</tr>
<tr>
<td>Maximum-Signal Plate Current</td>
<td>50 Milliamperes</td>
</tr>
<tr>
<td>Zero-Signal Screen Current</td>
<td>4.0 Milliamperes</td>
</tr>
<tr>
<td>Maximum-Signal Screen Current</td>
<td>8.5 Milliamperes</td>
</tr>
<tr>
<td>Load Resistance</td>
<td>2500 Ohms</td>
</tr>
<tr>
<td>Total Harmonic Distortion, approximate</td>
<td>10 Percent</td>
</tr>
<tr>
<td>Maximum-Signal Power Output</td>
<td>2.3 Watts</td>
</tr>
</tbody>
</table>

*Without external shield.

OPERATION CHARACTERISTICS

\[ E_f = \text{RATED VALUE} \]
\[ E_b = 120 \text{ VOLTS} \]
\[ E_{c2} = 110 \text{ VOLTS} \]
\[ E_{c1} = -8.0 \text{ VOLTS} \]
\[ E_{sig} = 5.6 \text{ VOLTS (RMS)} \]
AVERAGE TRANSFER CHARACTERISTICS

$E_f = \text{RATED VALUE}$

$E_b = 120 \text{ VOLTS}$

GRID-NUMBER 1 VOLTAGE IN VOLTS

PLATE CURRENT IN MILLIAMPERES

FEBRUARY 11, 1958

K55611-T028-3

AVERAGE TRANSFER CHARACTERISTICS

$E_f = \text{RATED VALUE}$

$E_b = 120 \text{ VOLTS}$

GRID-NUMBER 1 VOLTAGE IN VOLTS

SCREEN CURRENT IN MILLIAMPERES

FEBRUARY 11, 1958

K-55611-T028-4

ELECTRONIC COMPONENTS DIVISION

GENERAL ELECTRIC

Schenectady 5, N. Y.